

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 187 AND HUNTINGTON PARKWAY IN MONTGOMERY COUNTY. THE WORK IS NECESSITATED BY THE CONSTRUCTION OF A FOURTH LEG TO THE INTERSECTION. MD 187 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH A LAG EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR N.B. MD 187. THE INTERSECTION WILL NOW OPERATE IN A NEMA FIVE-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH A LAG EXCLUSIVE-PERMISSIVE LEFT TURN PHASE FOR N.B. MD 187 AND SIDE STREET SPLIT PHASING. THE ALTERNATE PEDESTRIAN PHASE FOR THE SOUTH LEG OF MD 187 AND THE CONCURRENT PEDESTRIAN PHASE FOR THE WEST LEG OF HUNTINGTON PARKWAY WILL REMAIN THE SAME.

CONTROLLER REQUIREMENTS

A NEW EIGHT-PHASE, FULLY-ACTUATED CONTROLLER WITH TWO (2) FOUR CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS HOUSED IN A NEMA "6" BASE MOUNTED CABINET WILL BE INSTALLED AT THE INTERSECTION.

SPECIAL NOTE

CONTACT MR. ROBERT GONZALAS OF THE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AT (240) 777-8761 72 HOURS PRIOR TO THE START OF WORK.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	6 CY	TEST PIT EXCAVATION
5001	3 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW (LEFT)
5001	1 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW (LEFT/THRU)
5003	7 EA	REMOVE EXISTING PAVEMENT MARKING LETTER OR ARROW
5004	230 LF	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5005	65 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5006	140 LF	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5007	350 LF	FURNISH AND INSTALL 5 IN. YELLOW HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5008	610 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKING - ANY WIDTH
8006	3 EA	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
8010	8 EA	FURNISH AND INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION
8011	32 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8019	9 EA	FURNISH AND INSTALL 8 IN. VEHICULAR SIGNAL HEAD SECTION
8020	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
8025	4 EA	FURNISH AND INSTALL 16.5 FT. MAST ARM POLE AND 50 FT. MAST ARM WITH A 15 FT. "T" DIMENSION
8030	2 EA	FURNISH AND INSTALL PEDESTAL POLE ANY SIZE
8032	2 EA	FURNISH AND INSTALL PEDESTRIAN PUSHBUTTON AND SIGN
8048	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8051	140 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8053	100 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
8057	17 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8060	600 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
8067	280 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - SLOTTED
8068	30 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8070	120 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG
8072	6 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8080	7 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
8081	650 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR ALUMINUM, SHIELDED
8082	200 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO. 14 AWG
8083	500 LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR NO. 14 AWG
8084	90 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR NO. 14 AWG
8085	1300 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG
8087	1370 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN 1/4 IN. FLEXIBLE TUBING (NO. 14 AWG)
8088	400 LF	FURNISH AND INSTALL SAW CUT FOR LOOP DETECTOR
—	2 EA	FURNISH AND INSTALL 4-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
—	2 EA	FURNISH AND INSTALL D3-1 DUAL FACE SIGN (VAR. X 16")
—	1 EA	MAST ARM MOUNT
—	1 EA	FURNISH AND INSTALL R10-12 SIGN (36" X 42")
—	3 EA	MAST ARM MOUNT
—	1 EA	FURNISH AND INSTALL R3-5(L) SIGN (30" X 36")
—	1 EA	MAST ARM MOUNT
—	1 EA	FURNISH AND INSTALL R3-5(R) SIGN (30" X 36")
—	1 EA	MAST ARM MOUNT
—	1 EA	FURNISH AND INSTALL R3-6(L) SIGN (30" X 36")
—	1 EA	MAST ARM MOUNT
—	1 EA	FURNISH AND INSTALL M95-1 SIGN (72" X 24")
—	1 EA	MAST ARM MOUNT
—	3 EA	FURNISH AND INSTALL MONTGOMERY COUNTY INTERCONNECT SPLICE BOX
—	1 EA	FURNISH AND INSTALL ELECTRICAL SERVICE PEDESTAL
—	400 LF	FURNISH AND INSTALL 60-PAIR VOICE GRADE INTERCONNECT CABLE
—	1 EA	FURNISH AND INSTALL BASE MOUNTED CABINET AND CONTROLLER (MONTGOMERY COUNTY STANDARD)

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. LEE STARKLOFF ASSISTANT DISTRICT ENGINEER - TRAFFIC (301) 513-7318	MR. WAYNE MOWDY ASSISTANT DISTRICT ENGINEER - MAINTENANCE (301) 513-7304
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MR. AUGIE REBISH  
ASSISTANT DISTRICT ENGINEER - UTILITIES  
(301) 513-7350

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR. CHIEF, TRAFFIC OPERATIONS (410) 787-7630	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS (410) 787-7676
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MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF,  
TRAFFIC OPERATIONS  
(410) 787-7631

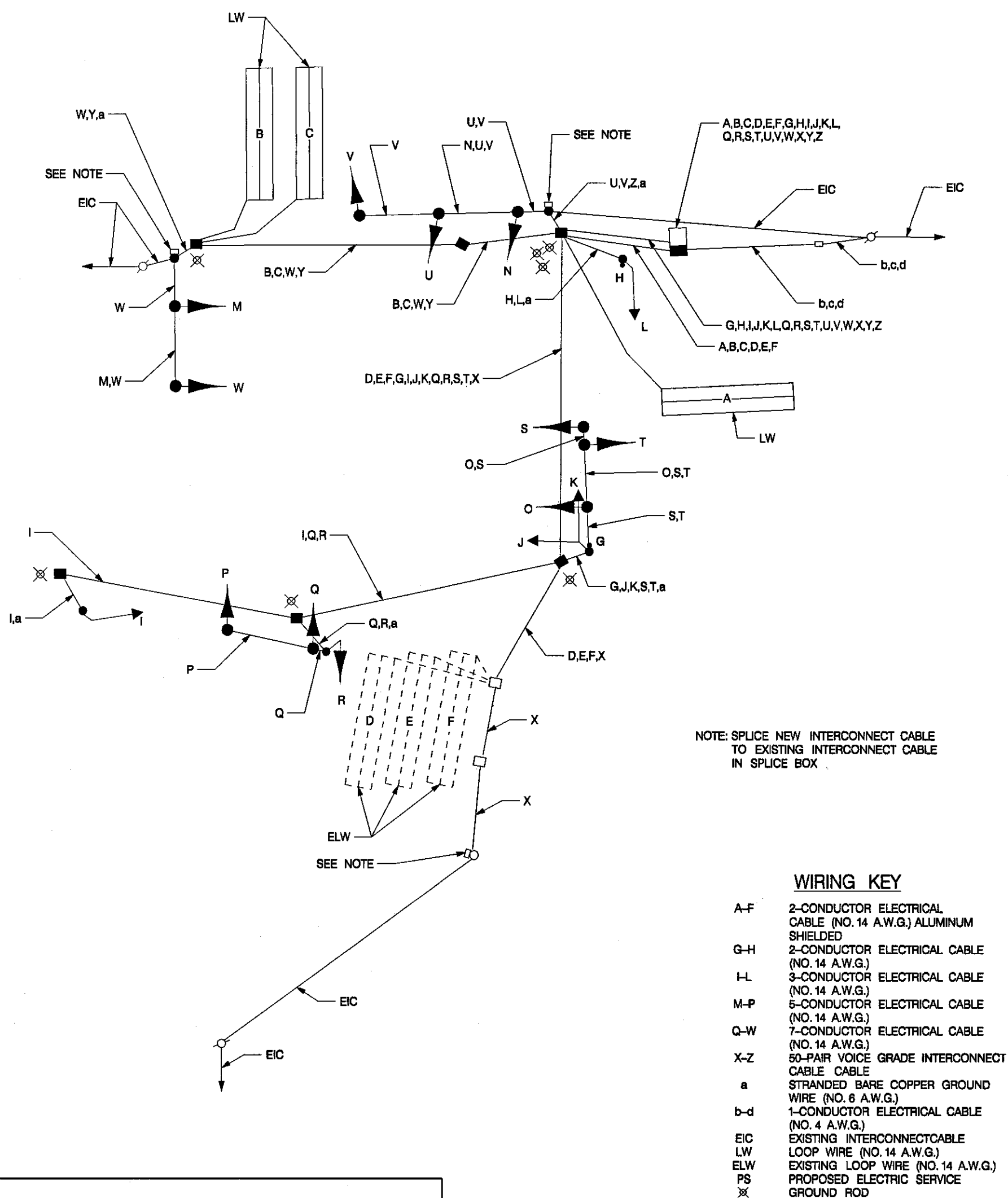
MS. DARLENE EIDE  
SUPPLY OFFICE  
SIGNAL SHOP WAREHOUSE  
(410) 787-7668

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
(410) 787-7652

CONTACTS FOR MONTGOMERY COUNTY

MR. ROBERT GONZALAS  
TRAFFIC ENGINEERING  
(240) 777-8761

WIRING DIAGRAM



PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 & 6 CHANGE	G	G	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 1 & 6	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 3	R	R	R	R	R	R	R	R	R	G	G	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW
PHASE 4	R	R	R	R	R	G	G	G	R	R	R	DW	DW	DW	DW
4 CHANGE	R	R	R	R	R	Y	Y	G	R	R	R	DW	DW	DW	DW
PHASE ALT. 4	R	R	R	R	R	G	G	G	R	R	R	DW	DW	WK	WK
PED CLEAR	R	R	R	R	R	G	G	G	R	R	R	DW	DW	FL/DW	FL/DW
CHANGE ALT. 4	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

**TRAFFIC CONCEPTS, INC.**  
325 Gambrills Road  
Suite E  
Gambrills, MD 21054  
(410) 923-7101

FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
GENERAL INFORMATION SHEET  
MD 187 AT HUNTINGTON PARKWAY

DRAWN BY: M. HOWELL	F.A.P. NO. 4318A-GI	TS NO. 4318A-GI	SHEET NO. 2 OF 2
CHECKED BY: T. ZAYDEL	S.H.A. NO. MONTGOMERY	T.L.M.S. NO. G276	
SCALE: 1"=20'	COUNTY: MONTGOMERY		
DATE: APRIL 2004	LOG MILE: 15018700.91		